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60. A method according to claim 28, wherein the radiation is a laser beam.

61. A pair of workpieces which have been welded by a method according to claim 28.

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REMARKS

An Information Disclosure Statement, a Form PTO-1449, and copies of all listed documents are submitted herewith, together with the requisite fee.

The allowability of claims 10, 22-23, 25 and 28, except as to dependence from a rejected base claim, is noted, with appreciation.

To facilitate the prosecution, claims 10, 22, and 28 have been redrafted in independent form. Also, in order to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention, the radiation absorbing material (claims 22 and 28) or dye (claim 10) has been defined as being visually transmissive "after welding", as described in the specification. Some of the dependent claims have been amended for consistency. Dependent claim 26 has been amended to remove the term "such as", and new dependent claim 30, dependent on claim 26, has been added. Also, new dependent claims 31-61, have

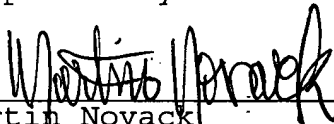
been added, these claims being similar to existing dependent claims, and being made dependent from amended independent claims 22 and 28.

Claim 1 has been cancelled, without prejudice, as Applicant intends to file a continuation application to continue prosecution thereof.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attachment is captioned "Version With Markings To Show Changes Made."

In view of the foregoing it is believed that all claims of this application are now in condition for allowance, and such favorable action is respectfully solicited. In the event there are any remaining issues, however, it is asked that the Examiner kindly telephone the undersigned counsel collect so that they can be resolved.

Respectfully submitted,



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VERSION WITH MARKING TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 1 has been cancelled.

Claims 2-11, 13-17, 20-22, 26, and 28 have been amended as follows:

2 (amended). A method according to claim ~~±~~ 10, wherein the radiation absorbing ~~material~~ dye is sandwiched between two workpieces.

3 (amended). A method according to claim ~~±~~ 10, wherein the radiation absorbing ~~material~~ dye is provided in at least one of the workpieces.

4 (amended). A method according to claim ~~±~~ 10, wherein the radiation absorbing ~~material~~ dye is provided on ~~the~~ a substrate by moulding the substrate in a mould with an insert formed by or including the radiation ~~absorbent material~~ absorbing dye.

5 (amended). A method according to claim ~~±~~ 10, wherein the radiation ~~absorbent material~~ absorbing dye is provided as a coating on ~~the~~ a substrate.

6 (amended). A method according to claim  $\pm$  10, wherein the radiation ~~absorbent material~~ absorbing dye is provided by coextruding the material with ~~the~~ a substrate.

7 (twice amended). A method according to claim  $\pm$  10, wherein the radiation absorbing ~~material~~ dye is exposed to radiation prior to positioning the workpieces together.

8 (twice amended). A method according to claim  $\pm$  10, wherein the radiation absorbing ~~material~~ dye is exposed to radiation through one of the workpieces.

9 (twice amended). A method according to claim  $\pm$  10, wherein the workpieces are made of plastics.

10 (twice amended). A method of forming a weld between workpieces over a joint region, the method comprising:

exposing the joint region to incident radiation having a wavelength outside the visible range so as to cause melting of the surface of one or both workpieces at the joint region, and allowing the melted material to cool thereby welding the workpieces together, the method further comprising providing a radiation absorbing dye at the joint region in one of the workpieces or between the workpieces which has an absorption band matched to the wavelength of the incident radiation so as to

absorb the incident radiation and generate heat for the melting process, the radiation absorbing dye being visually transmissive after welding according to claim 1, wherein the radiation absorbing material is a radiation absorbing dye.

11 (twice amended). A method according to claim  $\pm$  10, wherein the lower limit of the absorption band is above 700nm.

13 (twice amended). A method according to claim  $\pm$  10, wherein the absorption band defines the range 820-860nm.

14 (twice amended). A method according to claim  $\pm$  10, wherein the absorption band lies in the infrared range.

15 (twice amended). A method according to claim  $\pm$  10, wherein the absorption band does not include the range 400-700nm.

16 (twice amended). A method according to claim  $\pm$  10, wherein the radiation is in the infrared range.

17 (twice amended). A method according to claim  $\pm$  10, wherein the wavelength of the incident radiation lies in the range 700-2500nm.

20 (twice amended). A method according to claim  $\pm$  10,

wherein the radiation is a laser beam.

21 (twice amended). A pair of workpieces which have been welded by a method according to claim ~~±~~ 10.

22 (amended). A method of forming a weld between workpieces, comprising fabrics, over a joint region, the method comprising:

exposing the joint region to incident radiation having a wavelength outside the visible range so as to cause melting of the surface of one or both workpieces at the joint region, and allowing the melted material to cool thereby welding the workpieces together, the method further comprising providing a radiation absorbing material at the joint region in one of the workpieces or between the workpieces which has an absorption band matched to the wavelength of the incident radiation so as to absorb the incident radiation and generate heat for the melting process, the radiation absorbing material being visually transmissive after welding according to claim 1, wherein the workpiece comprise fabrics.

26 (amended). A method according to claim ~~±~~ 10, wherein the workpieces comprise thin films ~~such as polyester or PEEK.~~

28 (amended). A method of forming a weld between thermoplastic textile workpieces over a joint region, the method comprising:

exposing the joint region to incident radiation having a wavelength outside the visible range so as to cause melting of the surface of one or both workpieces at the joint region, and allowing the melted material to cool thereby welding the workpieces together, the method further comprising providing a radiation absorbing material at the joint region in one of the workpieces or between the workpieces which has an absorption band matched to the wavelength of the incident radiation so as to absorb the incident radiation and generate heat for the melting process, the radiation absorbing material being visually transmissive after welding according to claim 27, wherein the thermoplastic workpieces are textiles.

Claim 30-61 have been added, as follows:

30. A method according to claim 26, wherein said thin films comprise polyester or PEEK.

31. A method according to claim 22, wherein the radiation absorbing material is sandwiched between two workpieces.

32. A method according to claim 22, wherein the radiation absorbing material is provided in at least one of the workpieces.

33. A method according to claim 22, wherein the radiation absorbing material is provided on a substrate by moulding the substrate in a mould with an insert formed by or including the radiation absorbing material.

34. A method according to claim 22, wherein the radiation absorbing material is provided as a coating on a substrate.

35. A method according to claim 22, wherein the radiation absorbing material is provided by coextruding the material with a substrate.

36. A method according to claim 22, wherein the radiation absorbing material is exposed to radiation prior to positioning the workpieces together.

37. A method according to claim 22, wherein the radiation absorbing material is exposed to radiation through one of the workpieces.

38. A method according to claim 22, wherein the workpieces are made of plastics.



39. A method according to claim 22, wherein the lower limit of the absorption band is above 700nm.

40. A method according to claim 22, wherein the absorption band defines the range 820-860nm.

41. A method according to claim 22, wherein the absorption band lies in the infrared range.

42. A method according to claim 22, wherein the absorption band does not include the range 400-700nm.

43. A method according to claim 22, wherein the radiation is in the infrared range.

44. A method according to claim 22, wherein the wavelength of the incident radiation lies in the range 700-2500nm.

45. A method according to claim 22, wherein the radiation is a laser beam.

46. A pair of workpieces which have been welded by a method according to claim 22.

47. A method according to claim 28, wherein the radiation

absorbing material is sandwiched between two workpieces.

48. A method according to claim 28, wherein the radiation absorbing material is provided in at least one of the workpieces.

49. A method according to claim 28, wherein the radiation absorbing material is provided on a substrate by moulding the substrate in a mould with an insert formed by or including the radiation absorbing material.

50. A method according to claim 28, wherein the radiation absorbing material is provided as a coating on a substrate.

51. A method according to claim 28, wherein the radiation absorbing material is provided by coextruding the material with a substrate.

52. A method according to claim 28, wherein the radiation absorbing material is exposed to radiation prior to positioning the workpieces together.

53. A method according to claim 28, wherein the radiation absorbing material is exposed to radiation through one of the workpieces.

54. A method according to claim 28, wherein the lower limit of the absorption band is above 700nm.

55. A method according to claim 28, wherein the absorption band defines the range 820-860nm.

56. A method according to claim 28, wherein the absorption band lies in the infrared range.

57. A method according to claim 28, wherein the absorption band does not include the range 400-700nm.

58. A method according to claim 28, wherein the radiation is in the infrared range.

59. A method according to claim 28, wherein the wavelength of the incident radiation lies in the range 700-2500nm.

60. A method according to claim 28, wherein the radiation is a laser beam.

61. A pair of workpieces which have been welded by a method according to claim 28.